

IN THE CLAIMS

Claims 1-21 (Canceled).

22. (New) A phone supporting voice communication via a wireless packet network, the phone comprising:

at least one converter for converting a first voice stream into outgoing digital voice data;

at least one processor for processing outgoing digital voice data to produce packets for transmission via the wireless packet network;

a radio transmitter for transmitting the packets for transmission via the wireless packet network;

a radio receiver for receiving packets via the wireless packet network;

the at least one processor for selectively processing the packets received via the wireless packet network to produce incoming digital voice data; and

the at least one converter for converting the incoming digital voice data to produce a second voice stream.

23. (New) The phone of claim 22 further comprising:

at least one interface for accepting input from a user; and

the at least one interface for providing feedback to a user.

24. (New) The phone of claim 23 wherein the at least one interface comprises a keypad.

25. (New) The phone of claim 23 wherein the at least one interface comprises a display.

26. (New) The phone of claim 22 further comprising:

a handset having a microphone for transducing sound into the first voice stream, and a transducer for converting the second voice stream into sound.

27. (New) The phone of claim 22 wherein the at least one processor buffers incoming digital voice data for an adjustable amount of time to avoid the occurrence of a gap in the second voice stream.

28. (New) The phone of claim 27 wherein the adjustable amount of time is based upon a propagation delay.

29. (New) The phone of claim 27 wherein the adjustable amount of time is based upon a test packet.

30. (New) The phone of claim 22 wherein the phone transmits and receives packets comprising digital data not related to the establishment or receipt of a voice call.

31. (New) The phone of claim 22 wherein the wireless packet network communicates using an Internet protocol (IP).

32. (New) The phone of claim 31 wherein the Internet protocol is the transmission control protocol (TCP)/Internet protocol (IP).

33. (New) The phone of claim 22 wherein the wireless packet network communicates at a frequency of approximately 2.4 gigahertz.

34. (New) The phone of claim 22 wherein the wireless packet network communicates using a direct sequence spread spectrum technique.

35. (New) The phone of claim 22 wherein the wireless packet network communicates using a frequency hopping spread spectrum technique.

36. (New) The phone of claim 22 further comprising:
an interface for receiving information representing an image for transmission via the wireless packet network.

37. (New) The phone of claim 22 further comprising:
a circuit card interface for accepting a removable circuit card.

38. (New) The phone of claim 37 wherein the removable circuit card comprises a wired network interface card.

39. (New) The phone of claim 37 wherein the removable circuit card interface is compatible with the Personal Computer Memory Card Interface Association (PCMCIA) standard.

40. (New) The phone of claim 22 wherein the at least one processor monitors the first voice stream for a lack of speech for a minimum period of time.

41. (New) The phone of claim 40 wherein the minimum period of time is approximately 200 milliseconds.

42. (New) The phone of claim 40 wherein transmission of packets containing digital voice data is interrupted when a lack of speech for the minimum period of time is detected.

43. (New) The phone of claim 42 wherein an indication of a change in speech activity is transmitted following the detection of a lack of speech for the minimum period of time.

44. (New) The phone of claim 43 wherein the indication is a group identifier.

45. (New) A phone circuit supporting voice communication via a wireless packet network, the circuit comprising:

at least one converter for converting a first voice stream into a first digital representation of sound;

at least one processor for processing the first digital representation of sound to produce packets for transmission via the wireless packet network;

at least one interface for communicatively coupling the packets for transmission to a transmitter compatible with the wireless packet network;

the at least one interface for communicatively coupling packets from a receiver compatible with the wireless packet network;

the at least one processor for processing the received packets to produce a second digital representation of sound; and

the at least one converter for converting the second digital representation of sound into a second voice stream.

46. (New) The circuit of claim 45 wherein the wireless packet network operates at a frequency of approximately 2.4 gigahertz.

47. (New) The circuit of claim 45 wherein the wireless packet network operates using an Internet protocol (IP).

48. (New) The circuit of claim 47 wherein the Internet protocol is the transmission control protocol (TCP)/Internet protocol (IP).

49. (New) The circuit of claim 45 further comprising:

at least one interface for receiving input from a user; and

the at least one interface for providing feedback to a user.

50. (New) The circuit of claim 45 further comprising:
an interface for receiving information representing an image for transmission via the wireless packet network.

51. (New) The circuit of claim 45 further comprising:
a circuit card interface for accepting a removable circuit card.

52. (New) The circuit of claim 51 wherein the removable circuit card comprises a wired network interface card.

53. (New) The circuit of claim 51 wherein the removable circuit card interface is compatible with the Personal Computer Memory Card Interface Association (PCMCIA) standard.

54. (New) A method of operating a phone supporting voice communication via a wireless packet network, the method comprising:

converting a first voice stream into outgoing digital voice data;
processing outgoing digital voice data to produce packets for transmission via the wireless packet network;
transmitting the packets for transmission via the wireless packet network;
receiving packets via the wireless packet network;
selectively processing the packets received via the wireless packet network to produce incoming digital voice data; and
converting the incoming digital voice data to produce a second voice stream.

55. (New) The method of claim 54 further comprising:
accepting input from a user; and
providing feedback to a user.

56. (New) The method of claim 54 further comprising:
transducing sound into the first voice stream; and
converting the second voice stream into sound.
57. (New) The method of claim 54 wherein processing outgoing digital voice data comprises buffering incoming digital voice data for an adjustable amount of time to avoid the occurrence of a gap in the second voice stream.
58. (New) The method of claim 54 wherein the adjustable amount of time is based upon a propagation delay.
59. (New) The method of claim 54 wherein the transmitted and received packets comprise digital data not related to the establishment or receipt of a voice call.
60. (New) The method of claim 54 wherein the wireless packet network communicates using an Internet protocol (IP).
61. (New) The method of claim 60 wherein the Internet protocol is the transmission control protocol (TCP)/Internet protocol (IP).
62. (New) The method of claim 54 wherein the wireless packet network communicates at a frequency of approximately 2.4 gigahertz.
63. (New) The method of claim 54 wherein the wireless packet network communicates using a direct sequence spread spectrum technique.
64. (New) The method of claim 54 wherein the wireless packet network communicates using a frequency hopping spread spectrum technique.

65. (New) The method of claim 54 further comprising:
receiving information representing an image for transmission via the wireless packet network.

66. (New) The method of claim 54 further comprising:
accepting a removable circuit card.

67. (New) The method of claim 66 wherein the removable circuit card comprises a wired network interface card.

68. (New) The method of claim 66 wherein the removable circuit card is compatible with the Personal Computer Memory Card Interface Association (PCMCIA) standard.

69. (New) The method of claim 54 further comprising:
monitoring the first voice stream for a lack of speech for a minimum period of time.

70. (New) The method of claim 69 wherein the minimum period of time is approximately 200 milliseconds.

71. (New) The method of claim 69 further comprising:
interrupting transmission of packets containing digital voice data when a lack of speech for the minimum period of time is detected; and
refraining from interrupting transmission of packets containing digital voice data when a lack of speech for the minimum period of time is not detected

72. (New) The method of claim 69 further comprising:
transmitting an indication of a change in speech activity following the detection of a lack of speech for the minimum period of time.

73. (New) The method of claim 72 wherein the indication is a group identifier.